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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/823,926	04/14/2004	Herbert Huttlin	03928-P0007A	5298

24126 7590 03/16/2009
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EXAMINER

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ART UNIT	PAPER NUMBER
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1792

MAIL DATE	DELIVERY MODE
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03/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/823,926
Filing Date: April 14, 2004
Appellant(s): HUTTLIN, HERBERT

Wesley Whitmyer, Jr

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 10/28/08 as well as the response filed 12/10/08 to the Notice of Defective Appeal Brief, both appealing from the final office action mailed 6/3/08.

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is substantially correct. A correct statement of the status of the claims is as follows:

This appeal involves claims 7, 10-12, 16-22, 23-25, 29, 31, and 35 which stand rejected.

Claims 30 and 32-34 would be allowable.

Claims 8, 13-15, and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-6 and 9 have been cancelled.

(4) Status of Amendments After Final

No amendment after final has been filed.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is substantially correct
(Note that only independent claims 7 and 35 are on appeal).

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(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is substantially correct.

The changes are as follows:

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

The new matter rejection of claim 35 under 35 U.S.C. 112, first paragraph has been withdrawn in light of the interview summary as of 8/12/08 wherein support for the claim language was more clearly set forth.

NON-APPEALABLE ISSUE IN BRIEF

Appellant's brief presents arguments relating to objected claims 8, 13-15, and 26-28. This issue relates to petitionable subject matter under 37 CFR 1.181 and not to appealable subject matter. See MPEP § 1002 and § 1201.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is substantially correct (Note claims 8, 13-15, and 26-28 are objected to while claims 30 and 32-34 are deemed allowable and therefore not subject to the appeal).

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(8) Evidence Relied Upon

WO 00/10699	Huttlin	3-2000
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(Equiv: US 2001/0016224)

5,180,358	Pace	1-1993
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DE 10104184	Huttlin	8-2002
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(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

Claims 31 and 35 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 31, it is unclear how this claim further structurally limits the apparatus of claim 30. This claim discusses two options, one being how the second air gap is configured and then the other being how the air feed device is configured. The latter is already recited in claim 30 so it is unclear why it is further recited a second time? As for the former, while the second air gap is mentioned, how does this say any more than what is set forth in claim 30 unless in line 2, "an air stream" is deemed a secondary air stream separate from that mentioned in claim 30?

In claim 35, lines 8-9, it is unclear what [structure] constitutes an interrupted or uninterrupted annular air gap such that it encompasses the vertical axis of rotation? (Through discussion in the interview summary (8/12/08), it would appear that Appellant seeks an annular gap which would extend around the entire circumference of the upper portion of the wall but how would the gap extend around the entire circumference of the wall if the gap or opening is interrupted).

Claim Rejections - 35 USC § 103

Claims 7, 10-12, 16-20, 23-25, 29, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huttlin (WO 00/10699) in view of Pace (US 5,180,358).

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Huttlin provides a centrifugal type apparatus for treating particulate material with a coating substance comprising a container (24) having an upper opening for receiving the particulate material, the container having a base, an upright wall (28) widening from bottom to top, and a deflection means (42, 86) adjoining said wall in an upper region of said container in order to deflect a direction of movement of said material, the container including a central spray nozzle (60) therein for spraying coating on the particulate material; the container wall being rotatable via drive means (30, 36) about a vertical axis of rotation; a gap or opening (area about element 12) defined by a transition region between the wall and an inclined return surface (52) toward the deflection means; and an air feed device (66) for feeding an air stream through an apertured base plate of the container while feeding a portion of the air stream up the sidewall of the container to the gap within the container; at least one of said gap and said air feed device being configured such that said air stream introduced via the gap has a direction of flow (i.e., flow component) oriented substantially from the bottom of the container to the top of the container and, in a region adjoining said gap, oriented substantially tangentially with respect to the course of the wall up to the deflection means. Huttlin is silent concerning the use of an air gap connected to an air feed device such that air passes through or transitions through an upper portion of the container wall toward the deflection element to introduce air into the container. However, it was known in the art, at the time the invention was made, to provide an upper air inlet or gap in the wall of a centrifugal type apparatus to introduce a desired pressurized gas including air into the top of the apparatus for treating particulate material as evidenced by Pace (see col. 12, lines 13-17; see col. 9, lines 53-56 for pressurized gas including air). It would have been obvious to one of ordinary skill in the art to provide an upper air gap fed by a pressurized

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air feed device as taught by Pace in the upper wall of the Huttlin centrifuge type of apparatus as a source of pressure to facilitate agitation and/or mixing of the particulate material with the coating material in the upper portion of the container.

With respect to the deflection means (clms 10-12), part of the upper wall of the Huttlin container defines a deflection element, said part of the upper wall having a degree of curvature to direct the airflow and particulate material toward the return surface. In addition, the deflection means includes a separate outer element (42) which appears to be connected to a [pneumatic cylinder] (58), the separate outer element does not appear to be attached to the container such that it would not corotate with the wall of the container.

With respect to the deflection means being apertured or permeable (clm 16), the outer wall of the Huttlin container includes apertures and since the deflection means includes an extended part of the wall, it would be air permeable. The other portion of the deflection means (42) would appear to be air permeable because an exhaust duct (76 or 80) extends from the curved deflection element outside of the wall.

With respect to the air gap being adjustable (clm 17 and 18), it would have been within the purview of one skilled in the art to make the gap adjustable via appropriate means including guide elements so as to adjust the amount or volume of air supplied within the container.

With respect to the base (clms 19, 20, 23), as mentioned above, an air feed device (66) feeds an air stream through an apertured base plate (not numbered) of the container while feeding a portion of the air stream up the sidewall of the container to the gap within the container; at least one of said gap and said air feed device being configured such that said air stream introduced via the gap has a direction of flow (i.e., flow component) oriented

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substantially from the bottom of the container to the top of the container and, in a region adjoining said gap, oriented substantially tangentially with respect to the course of the wall up to the deflection means of the container. The base can include a plurality of concentric ring elements with different diameters as evidenced by Fig. 4 of Huttlin.

With respect to the base not corotating with the wall (clm 24), in Fig. 4, Huttlin illustrates an arrangement wherein the apparatus includes a stationary/non-rotatable base portion including legs for housing the motor (97) that rotates the container.

With respect to claim 35, the combined teachings of Huttlin and Pace would still render the claimed invention obvious as the Examiner has taken the position that the provision of an air gap connected to an air feed device in the upper portion of the container wall would be within the purview of one skilled in the art so as to enable more efficient mixing and/or agitation of the particulate material from the lower portion of the container on up to the top.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huttlin (WO00/10699) in view of Pace (US 5,180,358) as applied to claim 7 above and further in view of Huttlin (DE 10104184).

The teachings of Huttlin '699 and Pace have been mentioned above, but neither teach or suggest the air gap in the base being adjustable in width. However, it was known in the art, at the time the invention was made, in an apparatus for treating particulate material with coating material, to provide adjustable base plates (62) in a container, the base plates being in communication with piston cylinder members (66) in order to adjust the width or gap size openings between adjacent base plates thereby adjusting the flow of air into the bottom of the

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apparatus as evidenced by Huttlin ' 184 (see Fig. 3 for example). It would have been obvious to one of ordinary skill in the art to provide piston cylinder type adjustment members as taught by Huttlin '184 in the apparatus defined by the combination above in order to adjust the amount of air fed into the container via the base.

With respect to the automatic opening and closing of the base via air guide elements therein, the apparatus as defined by the combination above would allow the user to control the opening and/or closing of the air gap in the base via the piston cylinder type adjustment members. It would be within the level of ordinary skill in the art to vary and/or control the opening/closing of the at least one air gap in the base via the air guide elements or plural plates with the piston cylinder type adjustment members in order to prevent manual manipulation of the base and its part by the user when the apparatus is in operation mode or a shutdown mode.

(10) Response to Arguments

(Please note that in Appellant's argument section, headings C. and D. both clearly address the same grounds of rejection).

Appellant contends that claim 31 is not indefinite and the rejection of claim 31 under 35 U.S.C. 112, second paragraph should be withdrawn because claim 31 provides a limitation with respect to the structure of the second air gap or the air feed device with respect to a flow component in the region adjoining the second air gap which is not a limitation required by claim 30.

This argument is well taken in that it would appear that claim 31 was written with the intention of showing some type of air flow or flow component with respect to the region adjoining the second air gap but claim 31 is ambiguously written such that what Appellant

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intended is not clearly claimed. The "at least one of" language asserts the option of the second air gap OR the air feed device. The latter option causes most of the trouble. The air feed device is described in independent claim 30 such that when referring to "an air stream" in claim 31, "an air stream" should really be --said air stream--. Furthermore, the "flow component" of claim 31, should really be --said flow component-- when referring to the latter option. All of this said, claim 31 should be rewritten without the optional language but more clearly with the second air gap having said second air stream defining a second air flow component oriented as such.

Appellant contends that claim 35 is not unclear under 35 U.S.C. 112, second paragraph and the 112, second paragraph rejection should be withdrawn because the structure required for claim 35 can be understood in reading the claim in light of the specification. Appellants suggest that the specification discloses the nature of the structure of the annular gap in par. [0017]: "at least one air gap preferably extends interruptedly or uninterruptedly over the full circumference of the container, and the air stream is then preferably introduced through the air gap over the entire circumference." Thus, an uninterrupted annular gap would require that the first air gap extends about the full circumference of the container without any elements of the container that make the annular gap discontinuous or intermittent about the circumference. The interrupted annular gap would require that the first air gap extend about the full circumference of the container but contain elements of the container that make the annular gap discontinuous or intermittent about the circumference.

In response to this argument with respect to claim 35, while the notion of an air gap which extends around the circumference of the container can be viewed as an uninterrupted annular gap, it is not well taken that the claims, even in light of specification, par. [0017] clearly

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sets forth the structure of the interrupted annular gap which would extend around/about the circumference of the container but also contain elements of the container that make the annular gap discontinuous or intermittent about the circumference. If the interrupted gap is discontinuous or intermittent around the container circumference then the gap is no longer an annular gap as claimed but a plurality of discrete openings intermittently disposed around/about the circumference of the container. For this reason, claim 35 remains rejected under 112 second paragraph.

Appellant contends that the 103 rejection under Huttlin '699 in view of Pace should be withdrawn because placement of the Pace gas inlet port 408 on the Huttlin container wall would still not provide for the air stream introduced through said first air gap to have a flow component oriented substantially in an upward direction and, in a region adjoining said air gap, oriented substantially tangentially with respect to at least one of said wall and said deflection element because Pace teaches introducing the pressurized gas oriented in a downward direction.

The instantly claimed invention is still deemed obvious in light of the teachings of Huttlin '699 in view of Pace and this argument is unconvincing to withdraw the 103 rejection. Appellant asserts patentability based on the air feed device introducing an air stream into the apparatus via the upper portion of the wall such that the air flows upward and tangentially with respect to either the wall or the deflection element. Pace establishes the conventional wisdom in the art to place an air feed device in the upper portion of the wall of a container in a centrifugal type apparatus which treats particulate material. Patentability of the instantly claimed invention would be unwarranted because one of ordinary skill in the art would readily appreciate that with the widening construction of the Huttlin '699 rotatable wall, an air feed device can be introduced

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on an underside of the wall via an air gap in the underside of the wall such that air would be fed into the container and would flow upward and to some extent tangentially with an inner surface of the wall as the air would be supplied therein under pressure with the consideration of the air/gas source being below the apparatus on the floor/ground. Any adjoining flow of the air stream tangentially would result from the centrifugal and tangential flow of the particulate material moving within the apparatus due to rotation of the wall.

Neither WO '699 nor Pace provide for motivation to arrive at the improvement made by the instantly claimed invention since Pace does not teach nor fairly suggest that gas inlet port 82 could be used to assist the movement of particles along a deflection element in the upper region of the container and the configuration of the gas inlet port 82 in Fig. 1B of Pace suggests that this port would dispel particles away from the upper region of the container.

Appellants must recognize that the instantly claimed invention is obvious meaning that the modification is merely deemed to be within the purview of one skilled in the art. The prior art to WO '699 nor Pace explicitly teach the instantly claimed air flow to be upward and oriented tangentially relative to the wall or the deflection element. However, the routineer in the art knows that you can place an air feed device in an upper portion of the container in communication with an opening or gap in the container wall to introduced a desired pressurized gas as evidenced by Pace. Appellants must recognize that the Huttlin '699 construction of the wall is already such that air flow is directed upward with respect to the wall as shown the upper disposed arrows, thus, one of ordinary skill in the art would expect that air can be introduced through the wall to further facilitate mixing/agitation of the particulates in the container via additional air pressure upward and away from the base of the container. The additional

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pressurized air in the upper portion would also direct the particulate material up, around, and back the down back inclined return surface (52) of Huttlin '699. Thus, placement of the air feed device in the upper wall area of the container would not dispel particulate material away from the upper area of the container. Thus, patentability of the instantly claimed invention is deemed unwarranted.

Appellant respectfully asserts that the Examiner has unfairly used Appellant's disclosure as a roadmap to simply piece together and arrive at the instantly the claimed invention thus using a piecemeal rejection combined with improper hindsight to reject Appellant's claimed invention.

In respectful response to this argument, the Examiner has not unfairly used Appellant's disclosure as a roadmap to simply piece together and arrive at the instantly the claimed invention along with improper hindsight. The Examiner has great appreciation for the fact that it is Appellant's own invention, Huttlin '699 that has been used as a primary reference in this rejection. However, Appellant's improvement to the Huttlin '699 teachings to include an air gap in the container upper wall with an air feed device communicating therewith to further facilitate air flow upward and tangent/touching of the container wall to enhance the mixing/agitation of the particulate material in the container is deemed to be within the purview of one skilled in the art. In response to Appellant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's

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disclosure, such as reconstruction is proper. *In re McLaughlin*, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971).

Appellant contends that the 103 rejection under Huttlin '699 in view of Pace should be withdrawn against claim 35 because neither Huttlin '699 teach or suggest or provide motivation for an annular air gap that is either interrupted or uninterrupted that encompasses the vertical axis of rotation.

This argument is well taken in that neither Huttlin '699 nor Pace teach an annular air gap interrupted or uninterrupted that would encompass or extend around the vertical axis, meaning the air gap would extend all the way around the entire circumference of the container wall. However, instantly recited claim 35 would still be deemed obvious as the provision of a circumferentially extending air gap connected to an air feed device in the upper portion of the container wall would logically enable more efficient mixing and/or agitation of the particulate material within the container.

Appellant respectfully requests the withdrawal of the Examiner's rejection of claims 21 and 22 under Huttlin '699 in view of Pace and further in view of Huttlin '184 for reasons suggested in the removal of Huttlin '699 and Pace with respect to claim 7.

The obviousness rejection of claims 21 and 22 under Huttlin '699 in view of Pace and further in view of Huttlin '184 stand for reasons set forth above for maintaining the rejection of claim 7 under Huttlin '699 and Pace. Claims 21 and 22 are deemed to add no further improvement or enhancement to the art of record.

(11) Related Proceeding(s) Appendix

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No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Laura Edwards/

Conferees:

/Jennifer Michener/

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Supervisory Patent Examiner, Art Unit 1792